

# Shuxin Ding

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## Education

Ph.D., School of Automation, Beijing Institute of Technology, Beijing, 2012.9-2019.3, GPA 3.6/4.0. Adviser: Guoping Liu, Chen Chen and Bin Xin.

Joint Ph.D. Student, Center for Applied Optimization, Industrial and Systems Engineering, University of Florida, Gainesville, FL, 2016.9-2017.9. Adviser: Panos M. Pardalos.

B.Eng. in Automation, Beijing Institute of Technology, Beijing, 2008.9-2012.6, GPA 3.64/4.0.

B.Eng. in Electronic and Information Engineering, Exchange Student, The Hong Kong Polytechnic University, Hong Kong, 2011.1-2011.6, GPA 4.0/4.0.

## Research Interests

Facility location, Stochastic Optimization, Robust Optimization, Evolutionary Algorithms, Risk Management, Multi-objective Optimization.

## Publications

### *Journal Articles*

W. Xu, C. Chen, S. Ding, P. M. Pardalos. "A bi-objective dynamic collaborative task assignment under uncertainty using modified MOEA/D with heuristic initialization". *Submitted to Expert Systems with Applications*.

S. Ding, C. Chen, B. Xin, P. M. Pardalos. "A bi-objective load balancing model in a distributed simulation system using NSGA-II and MOPSO approaches". *Applied Soft Computing*. 2018, 63, 249-267.

S. Ding, C. Chen, B. Xin, J. Chen, "Status and progress in deployment optimization of firepower units". *Kongzhi Lilun Yu Yingyong/Control Theory and Application* 2015, 32(12), 1569-1581.

S. Ding, C. Chen, J. Chen, B. Xin, "An Improved Particle Swarm Optimization Deployment for Wireless Sensor Networks". *Journal of Advanced Computational Intelligence and Intelligent Informatics*, 2014, 18(2), 107-112.

### *Proceedings*

Y. Wei, S. Ding, H. Fang, X. Zeng, Q. Yang. "Distributed Nonsmooth Robust Resource Allocation with Cardinality Constrained Uncertainty". *Submitted to 2019 CCC*.

S. Sun, S. Ding. "Bunker hedging with Expected Loss Control by buffered Probability of Exceedance and Conditional Value-at-Risk". *In IAME 2017 Conference*. Kyoto, Japan.

Z. Sun, S. Ding. "Research on Standardized Development Method of Scenario for Combat Information Simulation System". In *Proc. of 33rd Chinese Control Conference (CCC)*. IEEE, 2014: 6298-6303.

S. Ding, J. Chen, C. Chen, B. Xin, "An improved deployment algorithm for wireless sensor networks based on Particle Swarm Optimization". *Proceedings of the Ninth China-Japan International Workshop on Internet Technology and Control Applications*, 2013: 138-142.

## Reviewer for Journals

Applied Soft Computing

IEEE Transactions on Cybernetics

IEEE Access

Journal of Advanced Computational Intelligence and Intelligent Informatics

## Research Experience

Optimization and Decision making in Networked System Deployment under uncertain environment, 2015-2016.

- Implemented a risk-averse rule to evaluate different facility location models through predefined scenarios

- Established covering location models with given distributions of demand points in different scenarios

- Programmed Matlab files via YALMIP and solved using CPLEX

Optimization and Decision making in Networked System Deployment under dynamic environment, 2014-2015.

- Implemented a node deployment system with dynamic environment including nodes' disruptions

- Established a maximal expected covering location model as planar location model and solved by Evolutionary Algorithms

- Developed an user interface system by VC++ with Oracle

## Teaching

*Beijing Institute of Technology*

Final Year Project (B.Eng.): Instructor Assistant, 2014.

Wings' Project funded by Beijing Municipal Commission of Education: Instructor, 2013-2014.

## Miscellaneous

C/C++, Visual Studio, Matlab, Cplex, Yalmip, SQL, Oracle, Python, SPSS, Minitab, VHDL.

## Honors and Awards

JACIII Young Researcher Award, 2017.

Second Prize in National Postgraduate Mathematic Contest in Modeling, 2013.

Outstanding Postgraduate Student, 2012-2013.

Third Prize in the Programming Contest in Beijing Institute of Technology, 2012/2013.

Second Prize in National Undergraduate Electronic Design Contest, 2011.

Five-time recipient of People's Scholarship in Beijing Institute of Technology, 2008-2012.

Last updated: February 19, 2019